



DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	US 6 122 087 A (TAKATSU TATSUHIKO ET AL) 19 September 2000 (2000-09-19) * column 2, line 49 - column 4, line 6 * * column 5, line 14 - line 28 * * column 6, line 53 - line 61 * * figure 1 *	1,2,5,6, 12,22-24	H04B10/155 H01S5/0687
Y	---	7-10,15, 16	
Y	MOTONOBU KOUROGI ET AL: "WIDE-SPAN OPTICAL FREQUENCY COMB GENERATOR FOR ACCURATE OPTICAL FREQUENCY DIFFERENCE MEASUREMENT" IEEE JOURNAL OF QUANTUM ELECTRONICS, IEEE INC. NEW YORK, US, vol. 29, no. 10, 1 October 1993 (1993-10-01), pages 2693-2701, XP000423090 ISSN: 0018-9197 * page 1, column 1 - page 2, column 1 * * page 4, column 2 *	15,16	
X	EP 1 075 063 A (AGILENT TECHNOLOGIES INC) 7 February 2001 (2001-02-07) * column 1, line 1 - column 2, line 50 * * column 3, line 13 - line 34 * * figure 1 *	1,3,4	H04B H01S
A	---	11,14	
Y	US 6 115 162 A (MONTGOMERY ROBERT ET AL) 5 September 2000 (2000-09-05) * column 2, line 49 - column 3, line 17 * * column 3, line 45 - line 58 * * column 4, line 21 - line 45 * * column 5, line 31 - line 38 * * figures 4,6,7 *	7-10	
A	---	20,21	
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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 7 August 2003	Examiner Vaquero, R
CATEGORY OF CITED DOCUMENTS			
X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document		T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons ----- &: member of the same patent family, corresponding document	

6

EPO FORM 1503 03/82 (P04C01)



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	WO 02 060016 A (DEL BURGO STEPHAN ;ARTUS HERVE (FR); CORVIS ALGETY (FR)) 1 August 2002 (2002-08-01) * abstract * * page 1, line 27-30 * * page 2, line 24 - line 27 * * page 7, line 16 - line 20 * * page 10, line 15 - line 23 * * page 11, line 1 - line 17 * * page 12, line 5 - page 13, line 2 * * figure 3 * * page 12 * -----	11,13, 17-21	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 7 August 2003	Examiner Vaquero, R
<div>CATEGORY OF CITED DOCUMENTS</div> <div>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</div> <div>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document</div>			



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims: 1,2,5,6,15-18,22-24

A method of controlling an optical signal, comprising the steps of:

- determining at least one actual beat frequency derived from a superposition of at least one optical reference signal with the optical signal having an actual frequency
- using the at least one actual beat frequency in order to control the actual frequency.
- providing a comb of optical reference signals, preferably controlled by an electrical master clock signal

2. Claims: 3,4,11-14

A method of controlling an optical signal, comprising the steps of:

- determining at least one actual beat frequency derived from a superposition of at least one optical reference signal with the optical signal having an actual frequency
- using the at least one actual beat frequency in order to control the actual frequency.
- determining and comparing target beat frequencies with actual beat frequencies.

3. Claims: 7-10,20,21

A method of controlling an optical signal, comprising the steps of:

- determining at least one actual beat frequency derived from a superposition of at least one optical reference signal with the optical signal having an actual frequency
- using the at least one actual beat frequency in order to control the actual frequency.
- preselecting the superimposing signal before detecting it

4. Claim : 19

A method of controlling an optical signal, comprising the steps of:

- determining at least one actual beat frequency derived from a superposition of at least one optical reference signal with the optical signal having an actual frequency
- using the at least one actual beat frequency in order to control the actual frequency.
- providing error signals, feeding them into loop filter
- combining the loop filtered signals with positive or negative sign according to a defined schema



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 02 10 2686

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

07-08-2003

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